

Notice of Allowability

Application No.

09/924,202

Examiner

Yubin Hung

Applicant(s)

KEITHLEY, DOUGLAS G.

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed 1 December 2004.
2. ☒ The allowed claim(s) is/are 21 and 22.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☒ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date 23 July 2004.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

Response to Amendment/Arguments

1. This action is in response to amendment filed on Dec. 1, 2004.
2. Claims 1-20 have been canceled and claims 21-22 have been added.
3. In view of applicant's amendment, the objections to the specification and Claim 15 (canceled) have been withdrawn.
4. In view of the applicant's amendment, the 35 USC § 112 rejection has been withdrawn.

Drawings

5. The drawings were received on December 1, 2004. These drawings are not acceptable because while defects indicated in the office action mailed July 23, 2004 have been corrected, the received copies, which have been submitted via facsimile, have not been labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) and the quality of the faxed copies is inadequate.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The

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figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures.

Allowable Subject Matter

6. Claims 21 and 22 are allowed.

7. The following is a statement of reasons for the indication of allowable subject matter.

8. Regarding claim 21, the prior art of record fails to teach or suggest, alone or in combination, a method for producing the reproduction of a sepia-tone image comprising, along with other limitations:

- calculating a benchmark 'a' value and a benchmark 'b' value for the visible-light image, while excluding from the calculation data having either an 'L' value less than a benchmark 'L' value or a negative 'b' value
- replacing the 'L' values of the data with data associated with infrared light reflected from the image

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The closest art of record, Deng et al. (US 6,580,824) discloses discarding pixels with a saturation value less than a threshold [Fig. 3, numeral 340; Col. 4, line 67 – Col. 5, line 3]. However, it does not teach discarding pixels based on their 'b' value nor using zero as the threshold value. In addition, Cheng et al. (US 6,040,905) discloses counting the number of pixels with a b^* value greater than a threshold in the process of computing a fiber color grade [Col. 10, lines 40-50]. While the pixels with a b^* value less than the threshold is not included (i.e., discarded), the value of the threshold has not been expressly specified, although it is obviously greater than zero, since it is the measurement of "yellowness" (i.e., $b^* > 0$) that is of interest.

Regarding replacement of 'L' value, Murakami et al. (US 4,967,276) discloses adjusting visible light data using infrared data [Fig. 6, numerals 5, 120, 160, 170; Col. 7, lines 14-18] and Weinreich (US 6,198,503) discloses a method that uses the infrared image of the same scene to identify the area of the visible-light image of the scene of which the image values are to be replaced. However, neither teaches or suggests replacing the 'L' (luminance) values with data associated with the corresponding infrared light reflection.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


Contact Information

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yubin Hung whose telephone number is (571) 272-7451. The examiner can normally be reached on 7:30 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta can be reached on (571) 272-7453. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Yubin Hung
Patent Examiner
April 25, 2005


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